MNGP2

MidNite Solar Inc.

MNGP2

Push buttons for quick access to menus

Multi Line Display

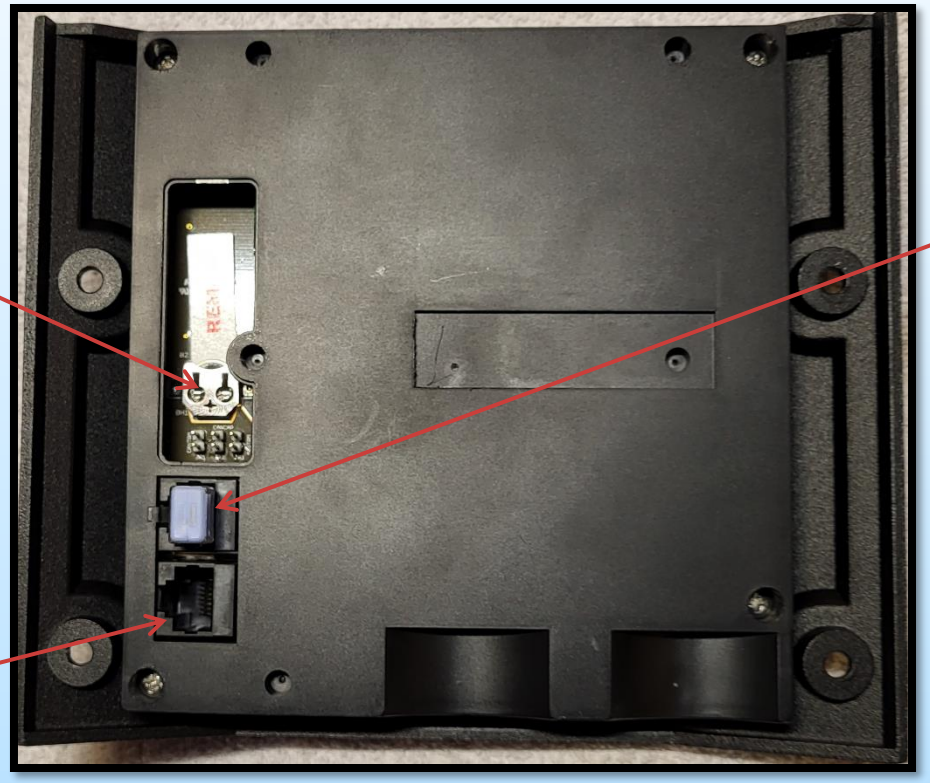
Rotary knob with push to select

Bluetooth antenna (do not turn!)

LED Indicators for at a glance indication

MNGP2

Removeable door for coin cell access.
Remove paper being careful not to lose coin cell inside MNGP2



Terminator

CANBUS jacks

LED's and what they mean

From Left to Right

AC 1 IN – Blinking indicates Rosie is ignoring the AC IN due to programming OR does not like the Voltage/Frequency
Solid indicates Rosie has closed the relay and is connected to AC IN

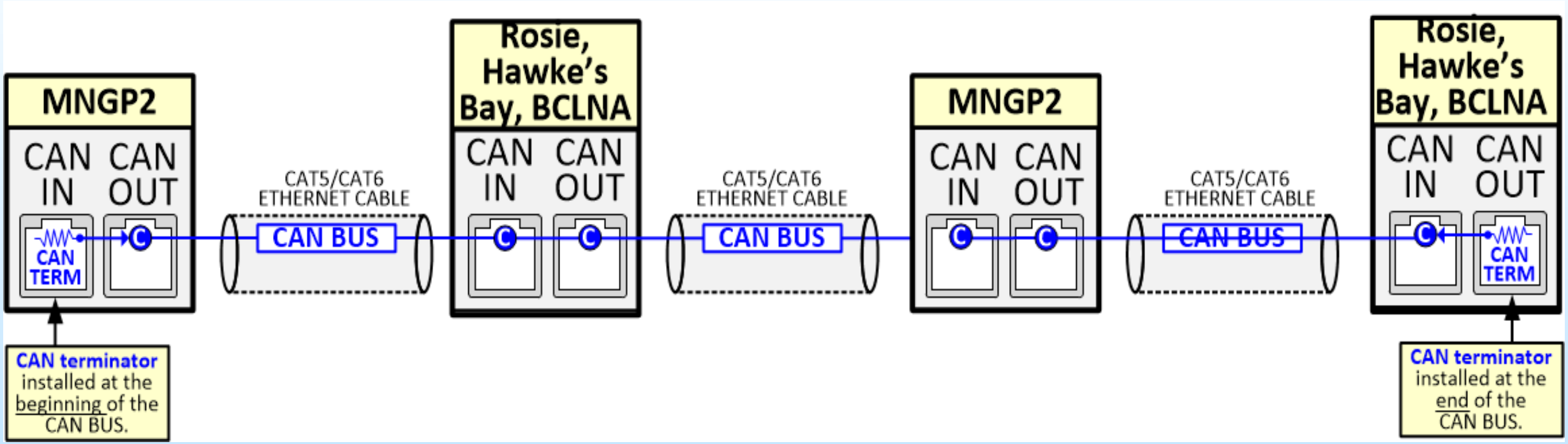
AC 2 IN – Not Used

INVERTER – Blinking indicates search, Solid indicates inverting

MPPT- Blinking indicates Float, Solid indicates Bulk MPPT, Off indicates Resting

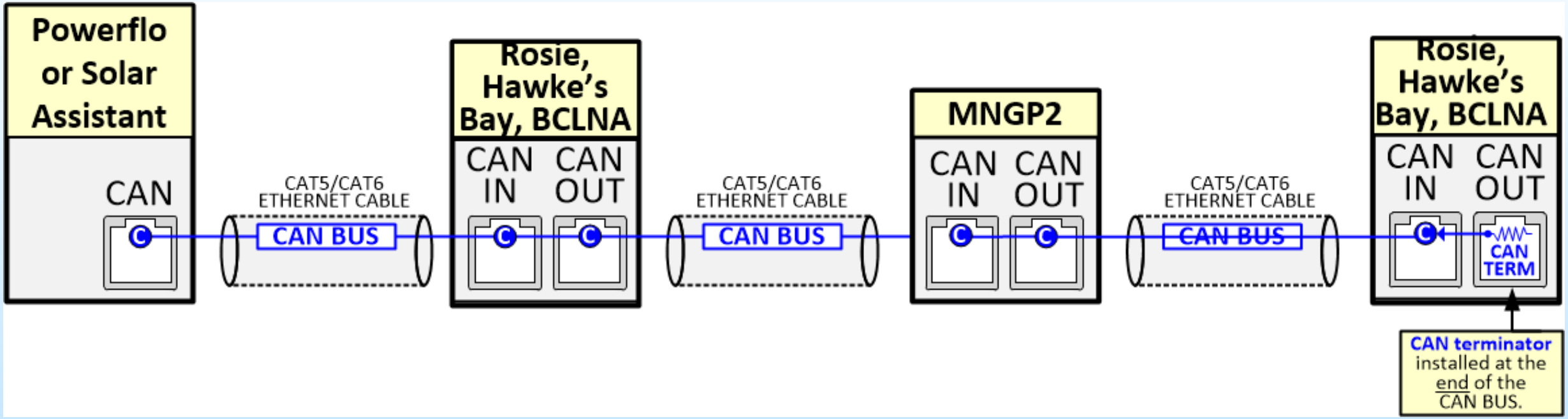
Error- Indicates the Rosie is in an active fault or warning see faults and warnings menu (USER button, scroll to FAULTS & WARNINGS)

CANBUS



- Canbus is one long string of devices. Each device has 2 jacks and they are in parallel so there is no real IN or OUT.
- No concern on what device goes where in the line.
- Terminate the 2 empty ports unless you use Solar Assistant or closed loop to a battery
- Standard Cat5 or Cat6 cable and or Pinout
- When stacking Rosies verify the stack bus is terminated and ideally keep all Rosies in series with other devices on either side

CANBUS with Battery and or Solar Assistant



- Connect the Powerflo or Solar Assistant to one end in place of the Terminator as shown
- If using both closed loop AND Solar Assistant replace both Terminators
- Solar Assistant must use the Canbus to USB cable and terminates that end of the Canbus
- Powerflo battery MUST use a 2 wire cable, cable is included with battery and the Powerflo also terminates that end of the Canbus

What does the MNGP2 do?

- Programs the Midnite system, Rosie, Hawke's Bay and Barcelona.
- Shows system info like SOC%, Battery Voltage, Loads, Prior History, Faults and Warnings, etc
- Controls some functions of the system
- Multiple MNGP2's are fine
- Several hundred feet away using standard cat5 cable

What works without the MNGP2

- The charging functions of the MPPT will continue to work if the MNGP2 is removed.
- Inverter charger will continue to function as programmed after removal of MNGP2.
- Low Battery cut out, LBX, Grid Support will continue to function after removal of MNGP2.
- AGS will continue to operate
- Logs are still being stored in devices so they can be retrieved by adding the MNGP2 back

What stops working without the MNGP2

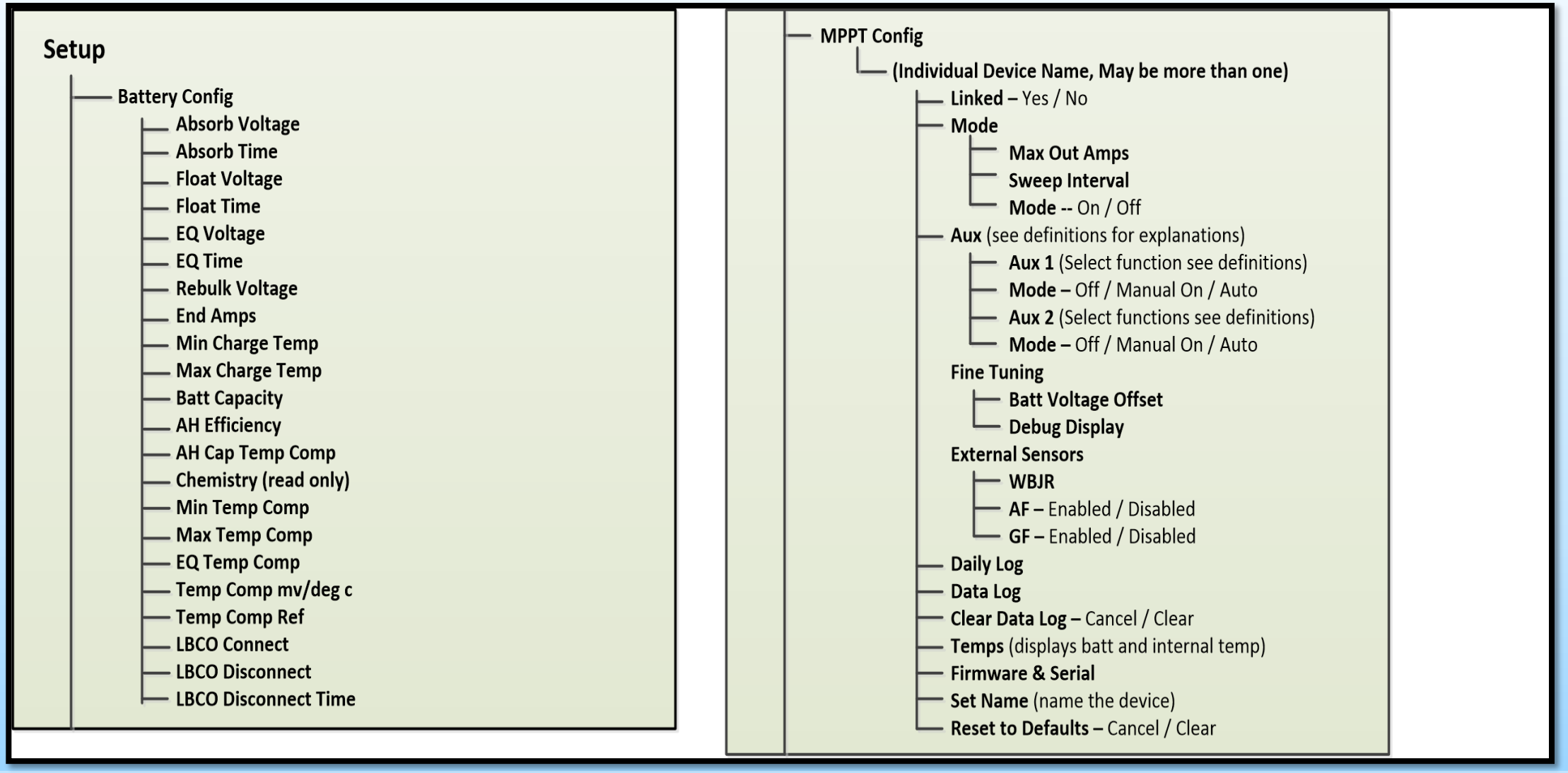
- Closed Loop will not function without it.
- Global current limit will not work without it.
- Adoption of a new device will not work without it.
- Firmware updates will not work without an MNGP2

Menu Map – Voice Button

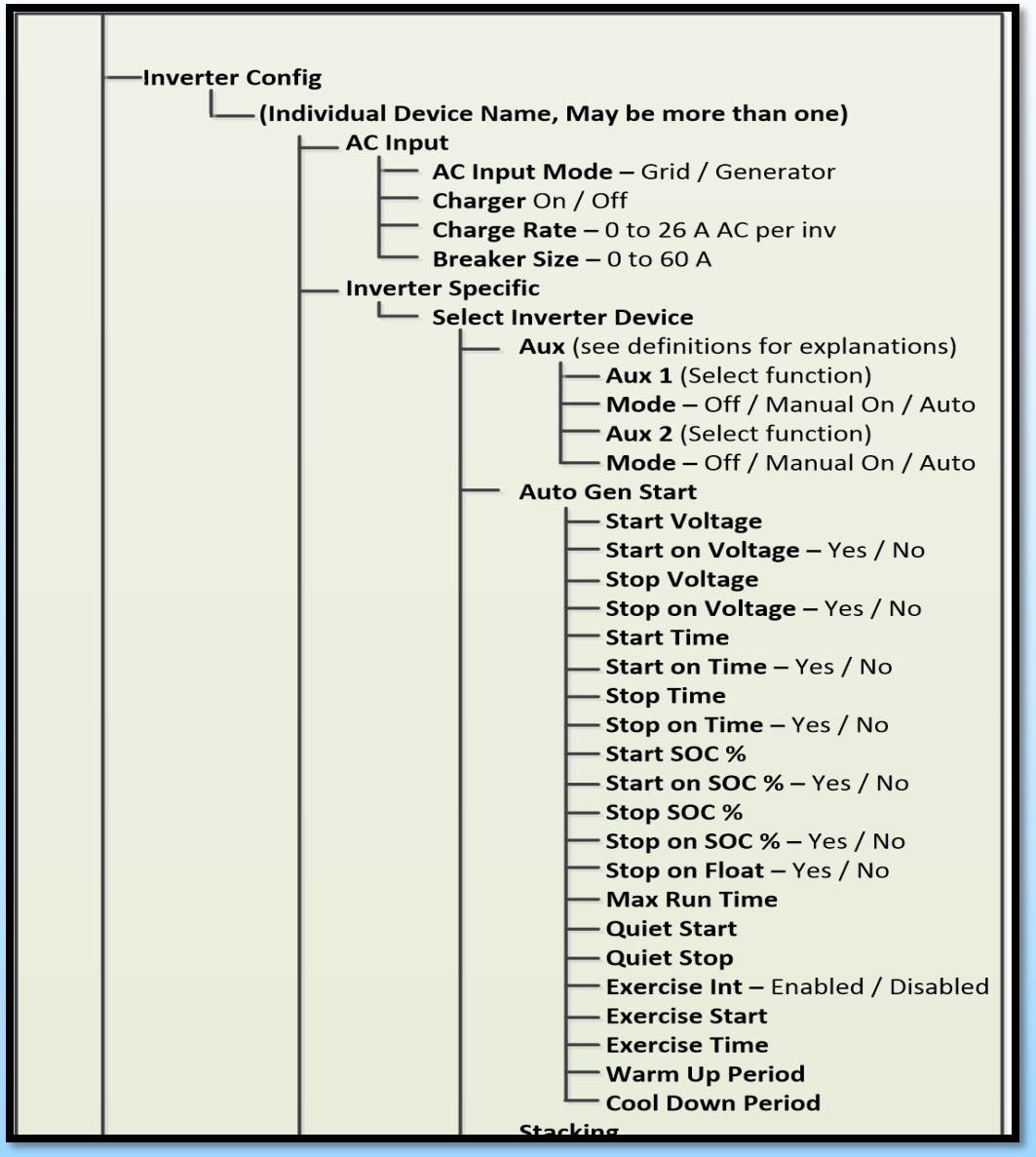
VOICE

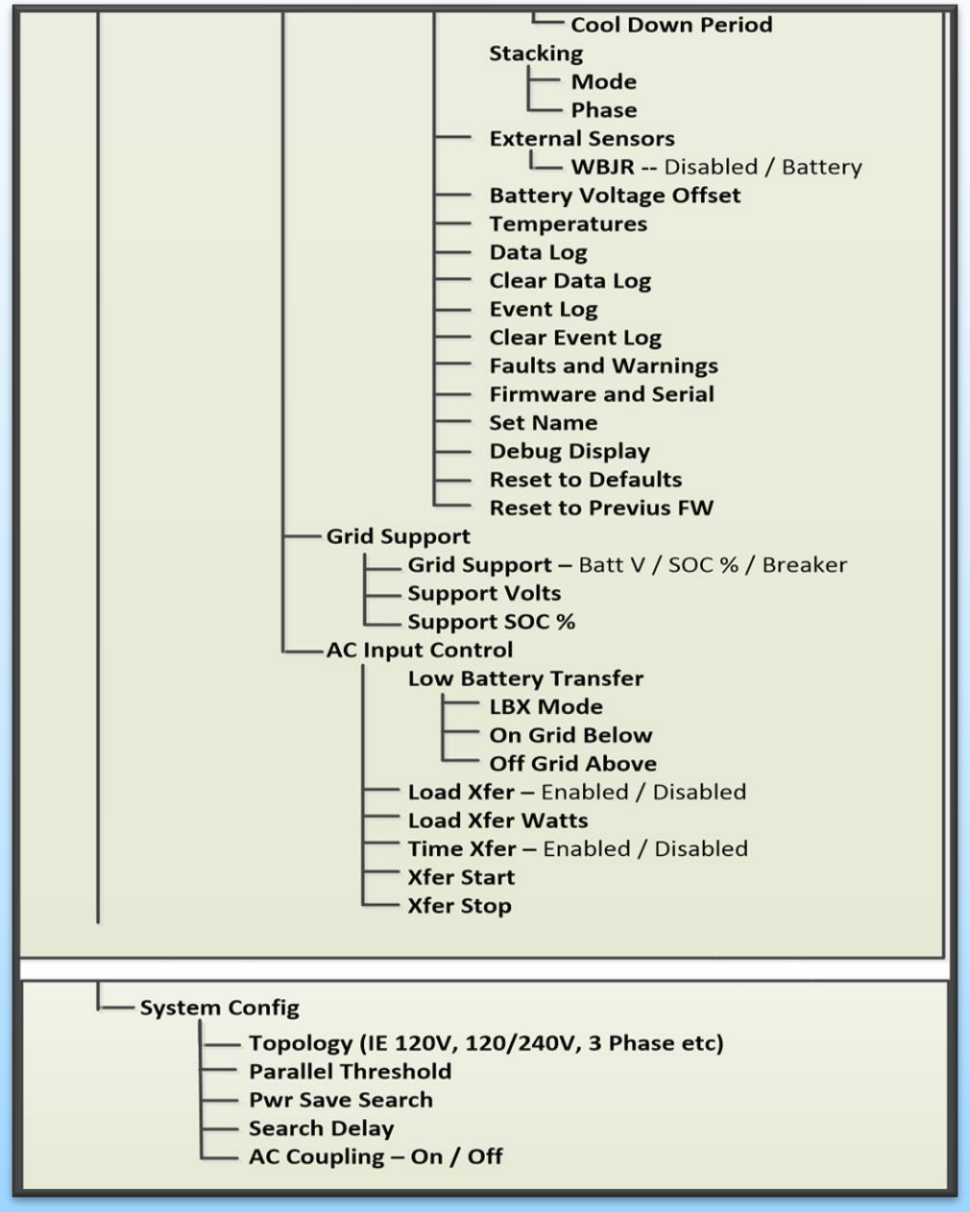
- **Audio Mode** – Off / Rick Mode / Errors / Warnings / Verbose / Chatty
- **Audio Volume** – 1 through 10
- **Quiet Time** – Enabled / Disabled
- **Start Time** – clock
- **End Time -** clock
- **Saving Alert** – Off / Beep / Voice
- **Status Interval** – time between announcements
- **Error Interval** -- time between announcements

Menu Map – Setup part A



Menu Map – Setup part B





Menu Map – User Button

USER

- **System Functions**
  - **Equalize** – Start / Stop
  - **Force Float** – Press knob to force a float charge
  - **Force Bulk** – Press knob to force a bulk charge
  - **AGS MODE** – on/off/auto
  - **Inverter** – on/off
  - **MPPT** – on/off
  - **Set System to Defaults** – resets complete system to defaults
- **Faults and Warnings**
- **Firmware versions**
- **Serial Numbers**
- **MNGP2**
  - **Info**
  - **Set Name** – Allows you to name the MNGP2
  - **Display**
    - **Contrast** – Allows you to adjust contrast
    - **Brightness** – Allows you to adjust brightness
    - **Light Timeout** – Turns backlight off after a delay
    - **Menu Timeout** – reverts to status menu if enabled
  - **Knob Sensitivety** – Allows you to tweak sensitivity of knob
  - **Firmware** – MNGP2 specific
  - **Last Fault** – MNGP2 specific
  - **Reset Factory Defaults** – MNGP2 specific
  - **Bluetooth Status**
    - **Bluetooth** – On / Off
  - **Canbus Statistics**
- **Time and Date**
- **Password** – Enabled / Disabled

Menu Map – Bottom Row of Buttons

STATUS – repeated pushes of this button show multiple status screens

INV – See each inverter or a summary screen

AC

- **Generator Status**
  - **State**
  - **Last Reason for Start**
  - **Last Reason for Stop**
  - **Current input Voltage**
  - **Current input Frequency**
  - **Load info**
- **AC Input**
  - **Disconnect AC input**
  - **Connect AC input**
  - **Faults and Warnings** – Specific to input

MPPT – See each charge controller or a summary screen